

# APPARATUS FOR COLOR CONVERSION AND METHOD THEREOF

## Abstract

A color conversion apparatus and a method of color conversion are described for converting a first color in a first color space to a second color in a second color space. The color conversion apparatus includes a plurality of lookup tables storing color mappings relating the first color space to the second color space and a converter using the lookup tables to convert the first color to the second color. The first color space is the sRGB color space and the second color space is a device dependent color space, or vice versa. To reduce the table size, tables having little effect on the second color contain groups of input colors mapping to a same output color and are implemented with a memory having the address inputs connected to the upper most significant bits of an incoming color value. A gamma correction circuit is used to calculate the remaining tables.